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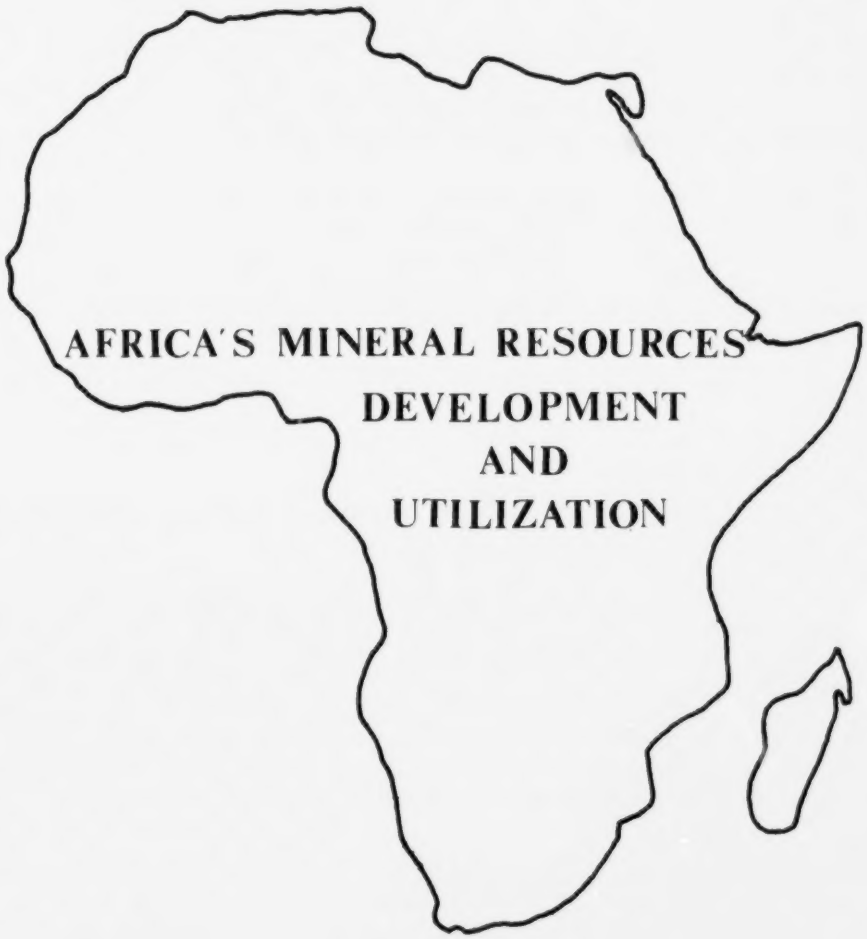
AFRICA'S MINERAL RESOURCES DEVELOPMENT AND UTILIZATION

UNITED NATIONS
ECONOMIC COMMISSION FOR AFRICA



AFRICA'S MINERAL RESOURCES DEVELOPMENT AND UTILIZATION

REPORT OF
The third Regional Conference
on the Development and Utilization
of Mineral Resources
in Africa

Kampala, Uganda, 6-15 June 1988

I. ATTENDANCE AND ORGANIZATION OF WORK

1. The third Regional Conference on the Development and Utilization of Mineral Resources in Africa was held in Kampala, Uganda, from 13 to 15 June 1988.

2. The Conference was officially opened by His Excellency Yoweri Kaguta Museveni, President of the Republic of Uganda and Chairman of the National Resistance Movement (NRM).

3. The following member States were represented at the Conference: Algeria, Angola, Burkina Faso, Burundi, Chad, Côte d'Ivoire, Egypt, Equatorial Guinea, Ethiopia, Guinea, Liberia, Mauritania, Mozambique, Nigeria, Rwanda, Senegal, the Sudan, Uganda, the United Republid of Tanzania, Zaire, Zambia and Zimbabwe.

4. The following international institutions and observers were also represented: Organization of African Unity (OAU), International Labour Organisation (ILO), United Nations Development for Technical Co-operation and Development (UNDTCD), Eastern and Southern African Mineral Resources Development Centre (ESAMRDC), Central African Mineral Resources Development Centre (CAMRDC) and Regional Centre for Services in Surveying, Mapping and Remote Sensing (RCSSMRS).

II. ELECTION OF OFFICERS

5. The Conference unanimously elected the following officers:

Chairman:	Uganda
First Vice-Chairman:	Liberia
Second Vice-Chairman:	Ethiopia
First Rapporteur:	Côte d'Ivoire
Second Rapporteur:	Nigeria

In addition, the Conference decided that the address by His Excellency Yoweri Kaguta Museveni, President of the Republic of Uganda and Chairman of the National Resistance Movement should constitute a working document for the Conference.

III. ADOPTION OF AGENDA

6. The following agenda ws adopted:

1. Opening of the meeting.
2. Election of officers.
3. Adoption of agenda and organization of work.
4. Statements of delegations.
5. Consideration of the report of the Technical Preparatory Meeting and recommendations.
6. Any other business.

7. Adoption of the report and recommendations of the third Regional Conference on the Development and Utilization of Mineral Resources in Africa.
8. Date and venue of the next Regional Conference.
9. Closure of the Conference.

7. The Chairman of the ministerial session of the second Regional Conference on the Development and Utilization of Mineral Resources in Africa, Hon. N.S. Dilamoru, Minister of State for Mines of the Republic of Zambia called the Conference to order. He thanked the Government of the Republic of Uganda for having invited the secretariat of the Economic Commission for Africa to convene the third Regional Conference on the Development and Utilization of Mineral Resources in Kampala. He then called upon Hon. Robert K. Kitariko, Minister of Water and Mineral Development of the Republic of Uganda to invite His Excellency Yoweri Kaguta Museveni, President of the Republic of Uganda and Chairman of the National Resistance Movement to address the Conference.

8. In his opening address, His Excellency Yoweri Kaguta Museveni extended a warm welcome to the Ministers and participants to the Conference. He expressed his belief that the Conference would greatly benefit technicians and policy-makers in Uganda, and enhance national efforts in the development and utilization of mineral resources in the country.

9. The President noted that the African continent was blessed with abundant and diverse mineral resources although large areas of the region had not been systematically explored. He observed that during colonial times the mineral resources of Africa were developed with the initiative of foreign concerns, using criteria of their own, to supply mineral raw materials mostly for industries outside the region. Only those mineral resources of interest to the foreign developers were developed. The mineral resources developed were only processed in the region to the extent required by industries in the consuming countries, without due regard for the production of consumer, intermediate and capital goods in Africa and for Africa. The consequences of that system of mineral resources development were, among others, that African indigenous initiatives to develop mineral resources for local consumption were suppressed. The continent's mineral resources of no interest to foreign developers but which could have been used locally remained undeveloped or underdeveloped. A culture dependent upon imported mineral-based products was established. Hence, mineral development during the colonial period contributed little to the economic advancement of the continent.

10. He regretted that in spite of some efforts by African countries, intended to enhance the contribution of minerals to socio-economic advancement since gaining their political independence, the African region had yet to exercise effective sovereignty over its mineral resources. No appreciable progress had been made in converting mineral raw materials to consumer, intermediate or capital goods. The continued export of mineral raw materials had deprived the African economies of considerable value-added benefits. National and regional industries which would have supplied African mineral processing, fabricating and capital goods industries had been prevented from development and growth. African economies had been deprived of consumer, intermediate and capital goods for use in other development sectors. Likewise, African countries had been deprived of increased employment opportunities and skills acquisition. Thus, the contribution of the African mining industry to the region's economic advancement had remained poor.

11. The President stressed that co-operation among African countries was necessary in order to enhance the contribution of minerals to the economic development of the region. The establishment of subregional and regional integrated iron and steel industries to supply products required by many economic sectors of the continent was paramount. Similarly, co-operation in energy development and utilization was necessary. Likewise, co-operation in the production of mineral fertilizers for the African agriculture industry was inevitable in view of continued food shortages and rapid population increase in the region. Co-operation by African countries in the copper and aluminium industries manufacturing products for consumption in the continent was also emphasized. Furthermore, co-operation in the sharing of existing mineral processing facilities or the establishment of new ones by African countries was underlined. The proposed co-operation arrangements would promote and sustain the use of complementary resources, the pooling of scarce investment resources, the establishment of African multinational enterprises to develop mineral-based industries, the reduction of regional investment requirements, and increased intra-African trade and consumption of mineral products and services.

12. The President noted that the maximum impact which the development of mineral resources could have in the economic and social advancement of the region would be realized when the requirements of the continent's mining industries were increasingly derived from the region. Furthermore, the outputs of the region's mining industries must increasingly be converted to consumer, intermediate and capital goods within and for consumption by African countries. Additionally, spending patterns of African countries must increasingly be based on goods and services produced in the regional economy.

13. He strongly advised that mineral exploitation should be linked with national development aspirations. Minerals were exhaustable. They should be used for strategic reasons and to secure capital goods and transfer of technology and not simply for earning foreign exchange in order to import consumer goods. To extract minerals out of the ground and to fail to use them to acquire a resource of a sustainable nature, like technology, was to condemn posterity to poverty, which the present generation had no moral right to do.

14. The President advised that in order to facilitate the implementation of the recommendations of the Conference, wide dissemination of such recommendations at country level was necessary. This in turn would enable national institutions to restructure their national development policies and respond to subregional and regional needs. Potential investors (both local and foreign) would be encouraged to invest in African multinational mineral-based industries to supply the needs of the region and others. Intra-African trade in mineral raw materials, semi-manufactures and final products would be enhanced. Improvements in transport links among member States to facilitate trade would be effected. Multi-country collaboration in such areas as manpower development and exchange, research and development, and the sharing of experience in mineral-related activities would be expanded. Moreover, industry, labour and universities should be encouraged to participate in future conferences. This would enable the instruments for the implementation of national development policies to be associated with and become part of the recommendations of the conferences.

15. On behalf of the participants, the Hon. William Stewart, Deputy Minister of Land, Mines and Energy of the Republic of Liberia, moved a vote of thanks to the President, the Government, the National Resistance Movement and the people of the Republic of Uganda for their whole-hearted hospitality. The motion was seconded by Mr. Getahun Demissie, Vice-Minister for Mines in Ministry of Mines and Energy of the Peoples' Democratic Republic of Ethopia.

16. The Deputy Executive Secretary of the Economic Commission for Africa (ECA) thanked His Excellency the President of the Republic of Uganda for setting aside time to open the meeting and expressed deep regret on behalf of Prof. Adebayo Adedeji who was retained in Addis Ababa at the request of the Secretary-General of the United Nations to prepare an urgent progress report on the United Nations Programme of Action for African Economic Recovery and Development. He indicated to what extent he was impressed by the recovery efforts undertaken by the people and Government of Uganda under the guidance of the National Resistance Movement. He also welcomed delegates, international organizations and observers to the Conference and paid tribute to the Honourable Robert K. Kitariko, Minister of Water and Minerals Development for the excellent arrangements made so as to ensure that the deliberations would take in the most congenial atmosphere.

17. Regarding the objectives of the Conference and the precarious situation of the mining sector in Africa since the previous meeting in Lusaka, Zambia in March 1985, he underlined the need for policy changes, structural adjustments, corrective measures at production level and rehabilitation in order to restore mine outputs to their former heights and achieve greater self-sustainment in the field of mineral resources development. There was a need for exploration in an attempt to avoid the long-term deterrent effects arising from lack of information on Africa's mineral potential. He further underlined the challenges of the future and difficulties ahead whether resulting from the eclipse of the metal age, growing substitution, declining investment and insufficiently developed inter-country and subregional co-operation.

18. He commended the work performed by the Technical Preparatory Committee under the able chairmanship of Mr. Mboijana, which was reflected in the report of the Technical Preparatory Committee and the Kampala Programme of Action for consideration by the Ministers responsible for mineral resources development in Africa. He finally expressed hope that Africa's determination to overcome the difficulties experienced in the mining sector in recent years would be rewarded, although the road to greater achievements was steep, long and difficult.

IV. ACCOUNT OF PROCEEDINGS

Opening of the meeting

Statements of delegations (agenda item 4)

19. The representative of Angola briefed the Conference on the mining sector conditions of his country, inherited from the colonial period. Knowledge of geology and mineral resources of the country was poor as a result of the nature of minerals development agreements between Angola and foreign mining

firms, and from the lack of rational and systematic exploration programmes the irrational planning of exploration in which emphasis was solely on high-content ores, and the concentration on oil, diamonds and iron. Long-term exploration permits granted to multinational firms were other factors which had contributed to this situation.

20. After independence, the Government emphasized the principle of sovereignty over the country's mineral resources and had devised a new national mining policy with a view to creating favourable conditions for a rational development of mineral resources, and preserving national interests. Unfortunately, the development of the mining sector had been slow owing to negative internal factors such as poor management, lack of expertise, difficulties in obtaining the necessary equipment, and external factors, mainly the effects of the international economic crisis on the Angola economy, the decline of the prices of mineral raw materials and the rising costs of equipment. Those constraints were also exacerbated by the situation created by the war. In spite of the difficulties, Angola was willing to co-operate with African countries in the development of mineral resources, and a strategy for better use of African minerals should be drawn up by the Conference.

21. The representative of Equatorial Guinea reaffirmed the commitment of his country to the Lagos Plan of Action and assured the meeting that his country would implement the recommendations of the Conference.

22. The Deputy Minister of Land, Mines and Energy of the Republic of Liberia underlined the catalytic role of the third Regional Conference on the Development and Utilization of Mineral Resources in Africa and the need to develop indigenous capabilities so as to broaden the industrial mineral base and to boost domestic consumption and trade in the region. The debt burden in Africa could be eased by making use of domestic mineral resources to reduce imports of capital goods. Such goals could be achieved by intensive studies, research and gainful transfer of technology in order to use local raw materials in manufacuring finished products following the example of West Germany and Japan after the Second World War. A united front to devise modalities for implementing the Lagos Plan of Action would contribute to greater achievements. There was also a need for a technical committee to intensely study the mineral sector and regional meetings at short intervals could widely benefit Africa's mineral sector.

23. In conclusion, the Deputy Minister recommended a programme of action emphasizing many of the recommendations formulated in the Kampala Programme of Action with a provision for river basin development leading to the production of cheap hydro-electric power, studies on economic, political and social constraints affecting mineral development and utilization in Africa and the establishment of a West African Natural Resources Development Centre including mineral resources for ECOWAS States.

24. The representative of Nigeria stated that his country supported policies and programmes which would lead to effective development and utilization of mineral resources in Africa. He informed the meeting that Nigeria placed particular emphasis on the development of industrial minerals for local industries. Existing subregional economic groupings and regional institutions should be strengthened to enable them to assist member States in implementing the recommendations of the Conference.

25. The head of the delegation of the Sudan informed the meeting that the Minister of Energy and Mining of the Sudan was unable to attend the third Regional Conference because of unforeseen circumstances. He reminded the meeting that the Sudan was one of the largest countries in the continent and had a high mineral potential which was recognized in a number of areas. This mineral potential was only slightly tapped and awaited development and utilization for the interest of the Sudanese people. Like most African countries, the Sudan was faced with a number of difficulties and constraints in developing and utilizing its mineral resources. The Sudan realized the importance of regional and subregional co-operation among African countries and believed this would help in overcoming the difficulties and enhance the possibilities of developing and utilizing the African mineral resources. The Kampala Programme of Action constituted a sound base for fruitful co-operation between the African countries. He finally told the meeting that he had been honnored by the wise and well-prepared opening address by H.E. the President of the Republic of Uganda. The document as a whole is a good guidance for the Conference and frank and lucid review of the situation in Africa's mineral sector. He also suggested that it be added as an annex to the final report of the Conference.

26. The Deputy Ministry for Energy and Minerals of the United Republic of Tanzania stated that since the Arusha and Lusaka conferences in 1981 and 1985 respectively, his country had put increased emphasis on geological mapping and mineral exploration. Expanded manpower development programmes and the restructuring of mineral development policies had also been effected to stimulate increased production and utilization of mineral resources. Co-operation with Mozambique in undertaking geological investigations along their common borders was under implementation. On mineral development policies, the country had introduced a mining policy for large-scale mining open to all operators (local and foreign), and small-scale mining open to local operators only. Since 1987, licensed individuals or companies could purchase gemstones and gold at competitive prices, export them and retain up to 70 per cent of the proceeds in foreign currency, to enable them to procure mining equipment and machinery.

27. The leader of the Ugandan ministerial delegation welcomed the Ministers and all participants and wished them a comfortable and enjoyable stay in Kampala. He referred to the Lagos Plan of Action to recall the need for a common strategy based on collective and co-ordinated measures for the exploitation and consumption of Africa's mineral resources which entailed the establishment of a domestic capacity to consume and utilize the region's mineral production. Past reliance on external exports had largely sustained foreign markets and the advancement of the developed economies whereas, meanwhile, a situation arose whereby Africa was producing what it did not consume and consumed what it was not producing. With collective concerted and integrated efforts of member States, industrial minerals including construction and building materials would be more extensively used so as to transform the continent into a better and enviable habitat. He further pointed out that the deliberations of the meeting should contribute towards making the mineral sector an effective instrument in the rehabilitation and restructuring of the region's economy.

28. The Minister of State of Zambia said that since the first Regional Conference held in Arusha in 1981, the African mining sector had been operating in an adverse external economic environment, characterized by a slow growth in industrial countries, rising protectionism, rising interests rates on external borrowing including unfavourable credit facilities, reduced inflow of foreign investment and continuing poor demand for and pricing of primary exports.

29. The development of African mineral resources continued to rely on the maintenance of the old traditional minerals industries, and the local utilization of minerals had not shown any significant growth because of the absence of a firm industrial base which, in its turn, was due to the slow pace at which African countries were acquiring the appropriate technology.

30. The African position, as viewed in the context of the mining world, was likely to decline more, particularly with the possibilities offered by the exploration of sea-bed mineral resources which would provide developed countries with raw materials for their industries, making them self-sufficient in, and not dependent on African minerals.

31. African States were urged to take the challenge with courage and determination, and work out a reliable programme strategy. He thanked member States and the ECA secretariat for the support extended to him in his capacity as Chairman of the second Regional Conference.

32. The Deputy Minister of Mines of Zimbabwe stressed the importance for the region to develop alternative supplies to Western countries of strategic mineral obtained in the Republic of South Africa which, following the example of Zimbabwe, could be produced by OAU member States provided a co-ordinated action programme is followed in this respect. Import substitution by downsteam beneficiation of minerals was a growing necessity to improve the living conditions in Africa and the debt burden on the region's economy could best be eased by developing mineral resources with a monetary value so as to improve the financial position of the region.

Consideration of the report of the Technical Preparatory meeting and recommendations (agenda item 5)

33. Mr. Saul Mboijana, Deputy Commissioner of Mines of Uganda and Chairman of the Technical Preparatory Committee, introduced the report and recommendations contained in the Kampala Programme of Action to the Ministers. The report and the Kampala Programme of Action were adopted after incorporating the amendments proposed during the discussions. The report and the Kampala Programme of Action appear as annexes I and II to this report.

Any other business (agenda item 6)

34. The need for monitoring the implementation of the recommendations and the arrangements for the next Regional Conference were also underlined. The Conference recommended that the members of the bureau and ECA should look into means for follow up to the recommendations and arrangements for the next Conference.

35. The meeting felt that iron was an important strategic mineral which needed to be reviewed periodically and recommended that this mineral should be included for consideration in the fourth Regional Conference.

Adoption of the report and recommendations of the third Regional Conference on the Development and Utilization of Mineral Resources in Africa (agenda item 7)

36. The report and recommendations reflected in the Kampala Programme of Action were formally adopted after amendments.

Date and venue of the next Regional Conference (agenda item 8)

37. The Conference discussed and emphasized the need to organize the Regional Conferences by rotation in the subregions of Africa so that the participants become acquainted with the problems of the different subregions. The Conference agreed to the principle of rotation and noted that the Eastern and Southern African subregion had so far already hosted the Conference whereas Central, West and North Africa had not.

38. The Conference accepted the invitation from Zaire to host the fourth Regional Conference on the Development and Utilization of Mineral Resources in Africa in 1990. The secretariat should consult the Zairean authorities on the exact date of the Conference.

39. The meeting recommended that workshops and seminars on various topics related to the recommendations of the third Regional Conference be held in Zimbabwe and other interested countries.

Closure of the Conference (agenda item 9)

40. Mr. William E. Stewart, Deputy Minister of the Ministry of Lands, Mines and Energy of Liberia, on behalf of all presented at the meeting, moved a vote of thanks to the President of the Republic of Uganda and Chairman of the National Resistance Movement, the Government and people of Uganda for their hospitality and unfailing support towards the objectives of the third Regional Conference. He also expressed his appreciation to the Chairman for the efficient manner in which he presided over the Conference.

41. In closing the Conference, the Chairman of the third Regional Conference thanked member States, international organizations and observers present at the Conference for the various contributions made which had greatly enhanced the quality of the deliberations. He also expressed his deep appreciation to the ECA secretariat for a work well done prior and during the Conference and for its unfailing commitments towards the development of mineral resources in Africa. He then declared the Conference officially closed.

REPORT OF THE TECHNICAL PREPARATORY COMMITTEE OF THE THIRD REGIONAL CONFERENCE ON THE DEVELOPMENT AND UTILIZATION OF MINERAL RESOURCES IN AFRICA

I. OPENING OF THE MEETING

1. The Chairman of the Technical Preparatory Committee for the second Regional Conference on the Development and Utilization of Mineral Resources in Africa, Mr. Hicuunga E. Kambaila of Zambia, called the meeting to order. He thanked the Government of the Republic of Uganda for having invited the secretariat of the Economic Commission for Africa to convene the third Regional Conference on the Development and Utilization of Mineral Resources in Kampala. In addition, he expressed the gratitude and appreciation of the participants to the Government and people of the Republic of Uganda for the warm reception and excellent facilities accorded to the meeting. He noted that global economic factors since the Second Regional Conference (1985) had continued to impose growth restrictions to the mineral industries of the African region. He thus proposed that the establishment of a strong regional industrial structure based on the minerals of the region to supply the needs of the African region could be the future solution to the problems of African industries.

2. In his opening address, Hon. Robert K. Kitariko, Minister of Water and Mineral Development of the Republic of Uganda extended a cordial and fraternal welcome to participants to the Preparatory Technical Committee of the Third Regional Conference on the Development and Utilization of Mineral Resources in Africa.

3. He recalled that the central theme of the Lagos Plan of Action adopted by African Heads of State and Government in 1980 was the promotion of a self-reliant and self-sustaining socio-economic development in the African region centred on the use of domestic factor inputs to supply regional needs. He stressed that the African mineral sector must conform to the objectives of the Plan, and that the meeting was expected to review and assess the extent to which the sector had achieved the expectations and aspirations of Africa's Heads of State and Government. In addition, the meeting was expected to identify appropriate policy options and alternative action programmes that would strengthen the contribution of the mineral sector towards the development of the African region. Since the inauguration of the Lagos Plan of Action, the African mining sector which was a major source of foreign exchange earnings, government revenue and employment opportunities for many African countries, had continued to register a negative annual growth. Poor prices for Africa's major export commodities; inadequate foreign exchange in the region to secure inputs; balance-of-payments deficits; the large import bills for energy; the fall in the flow of aid and foreign investment; high interest rates charged on external loans from financial institutions and the dependence on imports of skills, technology and capital goods and services were some of the adverse factors facing the mineral sector of the continent. Further future prospects for sea-bed mining could aggravate land-based mineral production and prices. The African mineral sector should in future be integrated in the continent's economies in support of industrial and agricultural development. Furthermore, increased technical manpower development at all levels; the expanded development of small- and medium-scale mineral development operations requiring small and medium investments and the establishment and strengthening of institutions dealing with mineral resources development should be encouraged.

4. On behalf of the Executive Secretary of the Economic Commission for Africa, Mr. Peter N. Mwanza, Chief, Natural Resources Division, expressed deep gratitude to the people, the National Resistance Movement and Government of the Republic of Uganda for having generously offered to host the third Regional Conference on the Development and Utilization of Mineral Resources in Africa. Likewise, he expressed the secretariat's appreciation for the warm hospitality and excellent facilities provided by the Government of the Republic of Uganda.

5. In pursuance of the recommendations of the first and second Conferences, the third Regional Conference would review progress in the implementation of the recommendations of the two previous conferences; examine national mineral development policies in order to determine how these policies could be improved to enhance co-operation by member States; consider possibilities of establishing African commodity associations concerned with specific minerals or groups of minerals; consider the findings of the regional survey on copper and aluminium fabricating facilities and prospects for intra-African manufacture and trade in copper and aluminium-based products; and review the development of the African mineral sector during the period 1985 to 1987 in order to determine prospects for the period 1988 and beyond. He expressed the hope that the reports prepared by the secretariat and participants together with the exchange of experiences during the deliberations would enable the meeting to define new priorities and identify areas that required concerted efforts on the part of individual countries and at subregional and regional levels for the dynamic development and utilization of mineral resources in the future

6. He observed that the African mining sector had experienced growing difficulties in the 1980s which had led to production falls of up to 75 per cent of 22 commodities over the last five years. The situation had further been aggravated by weak world mineral commodity demand, low mineral commodity prices, growing substitution and metal recycling in consuming countries. These stringent conditions were likely to prevail during the 1990s. Consequently, he called upon the meeting to lay the basis for a recovery programme for the African mineral sector along the lines defined in Africa's Priority Programme for Economic Recovery (APPER) and the United Nations Programme of Action for African Economic Recovery and Development (UN-PAAERD) in order to avert the further deterioration of the already critical condition of the sector.

7. There was a need for increased industrialization within the region based on Africa's minerals to supply mineral-based products to the economics of member States; the accelerated development of the energy resources of the region; the expansion of manpower development in the areas of high technical skills and managerial capacity; the revitalization and modernization of existing operations and the development of medium- and small-scale mineral deposits requiring modest financial resources. Those were some of the areas that could be given increased emphasis in the African mineral sectors.

II. ELECTION OF OFFICERS

8. The meeting unanimously elected the following officers:

Chairman:	Uganda
First Vice-Chairman:	Algeria
Second Vice-Chairman:	Chad
First Rapporteur:	Côte d'Ivoire
Second Rapporteur:	Nigeria

III. ATTENDANCE

9. The meeting was attended by representatives of 21 African countries: Algeria, Angola, Burkina Faso, Burundi, Chad, Côte d'Ivoire, Egypt, Equatorial Guinea, Ethiopia, Guinea, Mauritania, Mozambique, Nigeria, Rwanda, Senegal, the Sudan, Uganda, United Republic of Tanzania, Zaire, Zambia and Zimbabwe.

10. The following international institutions and observers were also represented: Organization of African Unity (OAU), United Nations Development Programme (UNDP), United Nations Conference on Trade and Development (UNCTAD), United Nations Centre for Transnational Corporations (UNCTNC), United Nations Office for Ocean Affairs and the Law of the Sea (UNOALOS), United Nations Department for Technical Co-operation and Development (UNDTCD), United Nations Industrial Development Organization (UNIDO), United Nations Educational, Scientific and Cultural Organization (UNESCO), Eastern and Southern African Mineral Resources Development Centre (ESAMRDC), Central African Mineral Resources Development Centre (CAMRDC), Regional Centre for Services in Surveying, Mapping and Remote Sensing (RCSSMRS), Nitro Nobel of Sweden, Bureau de recherche geologique et minière of France (BRGM), Commission for the Geological Map of the World (CGMW), and Radiator and Tinning (Pvt.) Ltd. of Zimbabwe.

IV. ADOPTION OF AGENDA

11. The following agenda was adopted:

1. Opening of the meeting.

2. Election of officers.

3. Adoption of the agenda and organization of work.

4. Review of progress in the implementation of the recommendations of the two previous Regional Conferences (1981 and 1985) on the Development and Utilization of Mineral Resources in Africa including review of reports on activities in each member State on the basis of developments in their respective mining sectors.

5. Review of the report on national mineral development policies in Africa and their effect on intra-African co-operation in mineral resources development and utilization, including country reports reviewing national mineral development policies indicating what aspects of these policies have enhanced or hindered intra-African co-operation in the development and utilization of minerals in the region, and proposing how such policies could be improved to strengthen the desired co-operation by countries in the mineral sector.

6. Review of the report on the possibility of establishing African associations concerned with specific minerals or groups of minerals.

7. Review of the reports on the regional survey of copper and aluminium fabricating facilities and prospects for intra-African manufacture and trade in copper and aluminium-based products.

8. Review of the reports on the African gemstones and semi-precious stones sectors and their future prospects in the framework of Africa's socio-economic development.

9. Report on the possibility of establishing a special mechanism within the African Development Bank for financing mineral development projects in Africa.

10. Review of the report(s) on the development of the African mineral sector during the period 1985 to 1987 and projected possible prospects to beyond 1990.

11. Any other business.

12. Establishment of the agenda for the ministerial meeting of the third Regional Conference.

13. Adoption of the report of the Technical Preparatory Committee.

14. Closure of the meeting.

V. ACCOUNT OF PROCEEDINGS

Review of progress in the implementation of the recommendations of the first and second Regional Conferences on the Development and Utilization of Mineral Resources in Africa, held in Arusha, United Republic of Tanzania, in February 1981 and Lusaka, Republic of Zambia, in March 1985 (agenda item 4)

12. A representative of the ECA secretariat presented document ECA/NRD/TRCDUMRA/4 on the above topic in which the implementation by the secretariat of the recommendations of the two previous Regional Conferences were reviewed. He outlined the difficulties the mining sector was faced with during the reporting period, which related to production falls, low growth, unfavourable marketing conditions, growing world competition, oversupply and over-capacity as well as heavy substitution. In pursuance of the mandate entrusted upon it at the second Regional Conference, the secretariat had carried out a number of studies and assignments.

13. In the area of utilization of industrial minerals in the region, the secretariat undertook a subregional survey of phosphate raw materials and a regional analysis of chloralkalies, salt, soda ash, caustic soda and aluminium sulphate requirements until the year 2000.

14. In the field of research and information, the secretariat examined the impact of sea-bed mining on the future of conventional land-based operations.

15. In the framework of its assistance to countries, economic surveys were conducted in Botswana with a view to assisting the country in identifying areas for generation of employment to promote socio-economic development. A similar study was undertaken in Mozambique to examine the possibility of redeployment of repatriated miners and workers from the Republic of South Africa.

16. Concerning training, the secretariat organized a seminar and study tour of Armenia, in the USSR. In addition, it contributed to the organization of several workshops in mineral exploration and a regional symposium on small-scale gold mining.

17. Regarding support to subregional institutions dealing with mineral development, the secretariat continued to support the activities of the Eastern and Southern African Mineral Resources Development Centre (ESAMRDC) and the Central African Mineral Resources Development Centre (CAMRDC).

18. Policy and decision options at country level with an impact on production and aspects relating to mineral development at large were also reviewed. In conclusion, the representative of ECA stressed that the recovery of Africa's mineral sector should be linked to the recommendations spelt out in Africa's Priority Programme for Economic Recovery (APPER) and the United Nations Programme of Action for African Economic Recovery and Development (UN-PAAERD) which emphasize the need for rehabilitation, corrective measures at production level and the necessary structural adjustments so as to optimize the outputs from the mineral sector.

19. In the ensuing discussions participants asked for more details on the scope of semi-precious stones in Botswana and underlined the need for greater emphasis on industrial raw materials; they also expressed interest in plant hiring schemes following the example of Zimbabwe in this field.

20. Regarding the dissemination of information, the meeting raised concern about the growing need to disseminate information on tradeable mineral products so as to promote intra-African trade.

21. Regarding this particular request, the representative of the ECA secretariat pointed out that this topic was incorporated in the programme budget of ECA for 1990-1991, considering the importance of intra-African trade in the region. In conclusion, the meeting recommended that in order to promote intra-African trade, member States must seek to improve domestic consumption of locally available minerals and mineral raw materials. Furthermore, the meeting recommended improved follow-up mechanisms aimed at achieving a better rate of implementation of the recommendations of the Regional Conference.

In this connection, the meeting suggested that subregional economic groupings and multinational institutions should be closely associated with any follow-up action in this respect.

22. The representative of Algeria briefed the meeting on the constraints and problems affecting Algeria's performance arising from conditions inherited from the pre-independence era when mining used techniques that favoured selective mining concentrating on high-grade ore and neglecting the less rich areas. Algeria had now taken full control of its mining sector and was engaged in a large-scale modernization programme of old mines, prospection and development of identified deposits so as to meet the requirements of the various branches of national industry: iron and steel, metallurgy and chemicals, glass making, oil, etc.. Algeria was now exploiting iron, phosphate, zinc, mercury, salt, kadin and barytum.

23. The representative of Burkina Faso briefed the meeting on his country's steps to promote and control gold mining within the legal framework governing the allocation of permits and through improved control carried out by the national geological survey. This improved follow-up and monitoring activities in the mineral sector. With regard to the purchase and sale of gold, he indicated that all related transactions were carried out through the Burkinabe Precious Metals Marketing Counter (CMP). Concerning mineral evaluation, he mentioned the work undertaken on the Perkoa lead, zinc and silver deposit where reserves were estimated at 4.5 million tons, assaying 17.43 per cent of zinc.

24. In the discussions that followed, the representative indicated that gold production at the Povra mine stood at 2,000 kg per annum. Concerning additional gold produced by small operators, statistics were available but he did not have the exact figures. With regard to safety conditions for small-scale miners, the Government was assisting by providing medical assistance and extension personnel.

25. The representative of Chad gave an account of the country's mining strategy under the provision of a new mining legislation. In that particular framework, priority was given to the establishment of a cement plant with a capacity of 50,000 tons per year as well as a mini-oil refinery in Ndjamena. The Geological Department was being strengthened to meet the need for gold and diamond prospecting.

26. The representative of Côte d'Ivoire informed the meeting that the implementation of mining development projects was the responsibility of SODEMI, a State-controlled mining organization which was involved in diamond mining, assistance to co-operative mineral evaluation and project development.

27. He also indicated that legal provisions authorized individuals to participate in mining. He further added that the country considered maximization of revenue from mining operations as a priority and placed emphasis on the training of specialists in the mineral sector.

28. In the discussion that followed, the representative of Côte d'Ivoire provided detailed explanations of ways and means to control production and elaborated on government levies with respect to the exploration/exploitation permits and production tax. Regarding the level of professional competence and of the constituent members of co-operatives involved in small-scale mining in Côte d'Ivoire, the meeting was informed that the co-operatives were formed by villagers who subsequently received training from SODEMI.

29. The representative of Equatorial Guinea briefed the meeting on exploration carried out since 1981 jointly with a Spanish concern involving geochemistry, the use of satellite imagery and aeromagnetics. The results showed interesting occurrences of iron-bearing ittaberites yet to be evaluated, alluvial colombo-tantalite with potential reserves of the order of 2,100 tons, gold, chrome-nickel and bauxite. The meeting was informed that the Government had the necessary provisions in the national mining legislation to attract investors. However, the country was experiencing reticence on the part of interested parties to commit themselves towards developing the country's mineral resources. The representative reiterated Equatorial Guinea's full commitment towards the objectives and recommendations of the first and second Regional Conferences.

30. The representative of Ethiopia gave a detailed account of the activities undertaken in pursuance of the recommendations of the second Regional Conference in a wide range of areas. He pointed out that in the framework of the country's Ten-Year Plan, Ethiopia had earmarked $US 700 million for activities in mineral resources development. These included geological mapping, inventory and development of industrial minerals, the commissioning in 1989 of a gold mine with a production target of 3,000 kg of gold per year, geothermal, oil and gas exploration and the exploitation of industrial and chemical raw materials. In the field of building up national and multinational capability, Ethiopia was a founding member of ESAMRDC and since 1982 had established two institutions, namely the Ethiopian Institute of Geological Survey (EIGS) and the Ethiopian Mineral Resources Corporation (EMRDC). The country was establishing a mining technical school and was incorporating a mining engineering programme at the University of Addis Ababa. UNDP and donor countries were providing technical assistance in the field of post-graduate training. In conclusion, the representative stated that an ore dressing laboratory was being established with the assistance of Italy.

31. The participants raised questions about the state of knowledge on phosphate resources, economic utilization of geothermal potential identified in the country and the methods used to undertake the geological mapping. The representative replied that phosphates occurrences were at an early stage of investigation, that an experimental generator with a 3 MW capacity was to be installed to exploit the geothermal resources whose overall potential was estimated at 30 MW and that mapping was carried out at 1:25,0000 scale using satellite imagery, aerial photography, structural analysis and ground control.

32. The representative of Guinea gave a brief account of the country's activities aimed at diversifying the exploitation of precious metals, diamonds and building materials as well as improving rural socio-economic development through small-scale gold mining. With respect to iron ore, the representative

informed the meeting on progress regarding the development of Mt. Nimba deposits in collaboration with Liberia, making use of the infrastructure available in Liberia. He also mentioned Guinea's reprocessing operations on diamond-bearing tailings aimed at recovering gold. In the field of marketing, the Department of Natural Resources within the Ministry of Mines had set up a mineral marketing directorate to monitor trade in bauxite, gold and diamonds.

33. Following queries by the participants, the representative of Guinea explained that small-scale gold mining was authorized in areas not suitable for mechanized mining and that permits were allocated by drawing of lots. With respect to technical and financial support to small-scale projects, requests to international organizations such as UNDP and bilateral agencies had been made. However, the Government did not provide financial assistance to current operations and the Central Bank had a monopoly for the purchase of gold produced by small operators.

34. The representative of Mauritania informed the meeting of his country's mineral endowment which encompasses 300 occurrences of mineral substances and mineral raw materials requiring detailed investigations in order to appraise their economic interest. The country's mineral policy was, in view of the shortage of financial and human resources to ease legislation so as to create incentives for investors and give them considerable advantages both in the mining legislation and the investment code. The Government had granted 11 permits for the exploration of oil, iron, copper, gypsum, sulphur, phosphates and uranium. Exploitation had begun for iron and gypsum but iron production was stagnant since 1984 (approximately 9 million tons); however, gypsum production had increased considerably from 5,000 to 20,000 tons even if the performance was well below the nominal capacity of the mine. Besides those minerals already covered by prospection permits, great emphasis was also laid on small-scale and semi-industrial exploitation in support of agriculture which was a priority for the Sahelian country. The advantages of that type of exploitation were the simple technology involved and the low financial resources required.

35. The representative of Mozambique informed the meeting of the early history of mineral exploration and development after independence. Steps were taken to promote exploration of marble, graphite, bauxite, coal, gold, pegmatite minerals, bentonite and other industrial minerals, beach sand minerals and hydrocarbons. Local production and joint venture schemes were under consideration for the production of gold, niobium-tantalum, and titanium-bearing beach sands. Mozambique was involved in geological mapping at 1:2,500,000 and 1:500,000 scales and was benefitting from bilateral and multilateral assistance. In the area of production, he mentioned the exploitation of bauxite by a Zimbabwean company on the common border with Zimbabwe as well as the exploitation of coal, marble, bentonite, copper and semi-precious stones carried out by mining parastatal companies.

36. The representative of Nigeria informed the meeting that a lot was taking place in the mineral industry in Nigeria. More emphasis was being placed on industrial minerals in order to satisfy local needs, thus effecting import substitution. The country was going through a structural adjustment programme which was also very favourable to the mineral industry. The restructuring had encouraged the local sourcing of all industrial raw materials including minerals. They had also led to inceased private sector investment in the minerals sector.

37. The representative of Nigeria further stated that the subregional groupings should begin to constitute themselves into specific units to be used for implementing ECA policy recommendations. Those units should meet more often and review the implementation of ECA recommendations for their specific regions and provide feedback to ECA.

38. The representative of Senegal reviewed progress in the mineral sector of his country since 1976 and mentioned the existence of a national mining strategy supplemented by a geological and mineral development programme. In this framework, emphasis was put on the development of natural resources and in particular the MATAN phosphate deposits with reserves of 40 million tons, part of which were earmarked for local application; construction materials and ornamental stones; the extension of ongoing projects for gold, iron and peat. All those actions were part of a general cartographic programme. The mineral development strategy had been drawn up taking into account some basic parameters: strengthening the structures of the laboratory units and revision of the mining laws. With regard to intra-African co-operation, the representative of Senegal made reference to the exemplary relations between Senegal and Nigeria in phosphate processing and the efforts of CEAO to promote joint projects in areas such as the manufacturing of glass.

39. The representative of the United Republic of Tanzania gave a detailed account of the country's policies, structural adjustment, rationalization efforts and incentive programmes aimed at improving minig development and increasing output from existing mines. He pointed out that these measures had revived interest in exploration and development activities by international and foreign companies in particular with respect to coal, gold and uranium. Regarding the small-scale mining sector, substantial increases in production had been recorded and efforts were made to supply operations with mining implements.

40. In the ensuing discussions, participants wondered whether the foreign exchange retention scheme operated by the United Republic of Tanzania related only to gold. The meeting was informed that the scheme applied to all minerals and that operations were allowed to open external accounts with the Central Bank for the purchase of imported inputs.

41. According to the information provided by the Ugandan delegation, the country's mineral development strategy was being revised to increase domestic consumption in addition to export-oriented production. Under the provisions of the new Mining Act, gold had received growing consideration. Along the same lines, the Ugandan Government was establishing a commission charged with the procurement and provision of equipment, setting up of internal markets and soliciting funds from external institutions for research and development. In view of the country's shortage of qualified manpower, Uganda had sought assistance from UNDP to establish training facilities for technicians at Kilembe mines and to incorporate mining and metallurgical options at Makerere University. Uganda had considered the possibility of manufacturing spare parts using existing facilities. In the field of research and development, programmes on clay were being implemented in collaboration with ESAMRDC whereas industrial materials as substitutes for imported primary products were regarded as feasible. In this regard, a committee for monitoring imported materials which were available in the country had been formed.

42. In the debate that followed, the representative informed the meeting of plans to rehabilitate tin and tungsten mines with the assistance of the European Economic Community (EEC). With regard to downstream integrated industries, there were prospects for tin smelting, producing tin plate and similar metallurgical processing of wolfram ore into tungsten products for domestic and subregional consumption.

43. The representative of Zaire underlined that the country had a long mining history, almost one hundred years old, and that there was a constant need for rehabilitation of mining and processing plants. The country had no plans to increase copper production owing to the current depressed market conditions. Regarding gold, there was a similar need for the renovation of existing installations of mechanized mines, whereas in the framework of the liberalization scheme adopted a few years back, small-scale mining was of growing importance. Government control over such operations was adequately taken care of.

44. In the ensuing discussions, the representative pointed out that under the liberalization policy there was no restriction in the granting of gold and diamond exploitation rights as long as the legal requirements were fulfilled. In respect of uranium production, the representative of Zaire informed the meeting that his country had ceased exploitation in 1958 as a result of depressed prices.

45. The representative of Zambia pointed out that the contribution of mining to the GDP had declined from 42 to 13 per cent in recent years but continued to be of great significance to the national economy. The declining copper production had now been arrested and there were further developments in the exploitation of gemstones and industrial minerals. To the question of the purity of copper refined in Zambia, he informed the meeting that Zambia produced an electrolitic copper of 99.85 per cent purity.

46. The representative of Zimbabwe indicated that the Zimbabwe Mining Development Corporation was spearheading mineral exploration in the country through its wholly owned subsidiary, the Mining Promotion Corporation. The Chamber of Mines at its annual meeting had recently adopted the theme of exploration as a basis for future sustenance of the mining industry in Zimbabwe. The Government was actively promoting small-scale mining and joint-venture participation in strategic mining activities. Under the provisions of the revised Mines and Mineral Act, an attempt was being made to reduce speculation on mineral resources and ensuring the use of optimum processing technologies. The meeting was also informed of various initiatives by the Zimbabwe Government in the form of loan schemes and plant hire facilities to small-scale miners and co-operatives.

47. In the field of training, Zimbabwe had established a mining engineering department at the University of Zimbabwe and was further strengthening training facilities at artisan level. With regard to research and development, the Government had established a pysical metallurgy laboratory aimed at the substitution of imported metals. The meeting was also informed that Zimbabwe had started production of tungsten carbide, had commissioned a gold refinery and was assessing the possibility of producing refractories.

48. In the ensuing discussions, the representative explained that the country had introduced a gold stabilization scheme which guaranteed a minimum price, irrespective of world price fluctuations. He further mentioned the existence of a roasting plant capable of processing retractory gold minerals in addition to utilizing other technological processes. He also stated that 90 per cent of Zimbabwe's gold production was obtained by large-scale exploitation while the remaining 10 per cent was accounted for by co-operatives and small-scale mines numbering 30,000 and between 5,000 and 10,000 respectively.

49. The Director-General of the Eastern and Southern African Mineral Resources Development Centre (ESAMRDC) presented a historical review of the establishment of the Centre and a detailed account of its achievements and problems since it became operational in 1980. He further informed the meeting on the difficulties encountered with respect to member States' support and the responses from international organizations as well as bilateral donors. In the course of the last two years, fundamental changes arising from a revival of interest on the part of member States had made it possible to increase staff recruitment and to strengthen its capacity for project implementation during 1988. The programme implied the construction of a documentation unit and laboratories in the fields of rock mechanics, mineral processing and extraction metallurgy and industrial minerals. Those new facilities would considerably broaden the range of services to the member States in response to their growing need for specialized technological assistance in the field of mineral development. Notwithstanding the above limitations, the Centre had nevertheless carried out a wide range of projects some of which had brought to a close of implementation. The other areas in which the Centre had had an impact included the training of as many as 243 experts in the subregion as well as the development of fertilizer raw materials and industrial minerals. In conclusion, the Director-General emphasized the lack of information on the development of minerals in the subregion and hoped that this would be redressed once the Centre's infrastructure was operational.

50. The presentation by the Director-General was followed by a lengthy discussion in which participants wondered whether the Centre had widely publicized itself, was involved in research and development and had carried out its activities with its own resources. In answer to those questions, the Director-General said that the Centre had publicized its activities through newsletters both at the regional and subregional levels. It had also executed programmes in which expertise was available, utilizing both budgetary and extrabudgetary resources. The representative from Ethoipia endorsed the importance of the activities performed by the Centre which were largely limited by low membership and appealed to the Conference to seek ways and means of increasing participation and support from the non-member countries. He added that in spite of earlier promises by some countries in the subregion to join the Centre, these had failed to honour their promise. The meeting recalled that the Centre arose out of the recommendation of the Lagos Plan of Action and strongly recommended that countries which were not members of the Centre should join it regardless of whether they were self-sufficient or not in the field of mineral resources development.

51. The meeting further recommended that the Centre should attempt to make greater use of available facilities in the subregion.

52. The Director-General of the Central African Mineral Resources Development Centre (CAMRDC) in Brazzaville informed the meeting that the objectives, role and work programmes of CAMRDC were similar to those of ESAMRDC. He further stressed the difficulties encountered with respect to financial support although membership standing at eight out of a total of ten countries was a clear sign of the political commitment of the member States to the Centre. With regard to external assistance, the Centre had received no support so far. This had delayed any capital development programme and had further limited the activities of the Centre. Nevertheless, since its conception, the Centre had organized seminars and workshops on mineral resources classification, geochemical exploration and remote sensing applied to mineral investigation. In addition, the Centre had organized in conjunction with the ECA secretariat a regional symposium on small-scale gold mining which was attended by 10 French-speaking countries of the West and Central African subregions. The meeting was also informed that the Centre had undertaken an inventory of infrastructure available in the subregion in mineral resources development. Subregional development could benefit from the liberalization of mining activities in selected minerals and could bring a satisfactory answer to rural migration. The Director-General of CAMRDC felt encouraged by the proposal of Gabon, a founder member of the Centre, to establish a special fund to support the mining industry.

53. In the discussion that followed, the meeting recommended that the dissemination of information on activities performed by the Centre could make a meaningful contribution to the development of minerals in the member States within the limits of the necessary confidentiality.

Review of national mineral development policies in Africa and their effects on intra-African co-operation in mineral resources development and utilization (agenda item 5)

54. A representative of the ECA secretariat introduced document ECA/NRD/TRCDUMRA/5 on "National mineral development policies and their effects on intra-African co-operation in the development and utilization of mineral resources". The paper defined a national mineral development policy as the sum total of the laws, regulations, agreements, and customs that affect the exploration, production, utilization, conservation of, and commerce in mineral commodities.

55. There were examples of mineral development policies and practices of some countries and considering the pertaining mineral development trends in the African region, the maximum impact that could result from mineral development in Africa would be realized where regional upstream and downstream industries based on mineral production existed, and spending patterns by the African countries were based on goods and services produced in the regional economy. It was emphasized that in the African context, such a situation would most probably be realized where a number of countries through the existing subregional economic groupings and intra-subregional arrangements intensified co-operation in the development and utilization of mineral resources through the use of complementary resources, the pooling of scarce investment funds, and the creation of large markets for mineral-based products.

56. Accordingly, appropriate national mineral development policies and practices in the African region would be those that supported multi-country collaboration in such areas as research and development and the exchange of information in mineral-related activities; encouraged the development and growth of multi-country mineral-based upstream and downstream activities and spending patterns based on goods and services produced within the co-operating countries; promoted and strengthened multi-country efforts in the training of key disciplines for mineral-related fields; emphasized the mobilization of investment funds from the co-operating African countries and other sources to support national and African multinational mineral-related projects intended to supply their economies; encouraged periodic consultations among representatives of governments, industry and labour at multi-country levels to determine how best mineral-related activities could be enhanced in the region and facilitated the growth of African multinational enterprises to develop resources.

57. For appropriate national mineral development policies to succeed, their implementation depended on other supportive national development policies and practices. In particular, policies and practices regarding the distribution and location of upstream and downstream industries based on mineral resources; pricing and payment arrangements in respect of intra-African trade in mineral raw materials, semi-manufactures and final mineral-based products; standardization and quality control in respect of mineral products traded among member States; the improvement of transport links among member States to facilitate intra-African trade in mineral products; the removal of tariff and non-tariff barriers by member States on mineral products and services available in the region; and other aspects which might be identified by member States.

58. It was therefore, suggested that in the review of mineral development policies, consideration be given to the aforementioned policy and operational aspects in order to develop national policies that encouraged and sustained co-operative arrangements by member States in the development and utilization of their mineral resources.

59. With regard to intra-African co-operation, the meeting was informed of a range of initiatives, attempts and effective projects which met the major concern of strengthening links between countries at regional and subregional level in a wide spectrum of areas with respect to safeguarding life and property in mining operations. Zambia emphasized that it was important to maintain safety standards and that quality control of mine outputs could improve intra-African trade.

60. The representative of Zambia also drew the attention of the participants to co-operative arrangements with the United Republic of Tanzania with regard to personnel training so as to alleviate the shortage of processing engineers and many engineers in general.

61. The representative of UNCTAD pointed out that a conducive intra-African trade context would imply a balanced situation between demand and supply so as to avert extremes which were not favourable for stable market process and could lead to unfair bargaining between producers and consumers.

62. The representative of Zimbabwe underlined that subregional policies could at times be in conflict with country policies. Similarly a situation could arise where official and private policies within the country were in conflict.

63. The representative of Mozambique informed the meeting that a new Mining Law and Mineral Law Regulations came into force in 1986 and that recently a Mining Fund had been created mainly to support small-scale mining activities. He also cited an example of intra-African co-operation in the field of exchange and sharing of geological and mining information between Mozambican and Tanzanian institutions. Memoranda of understanding, had also been signed covering other areas of mineral and hydrocarbon exploration.

64. The representative of the United Republic of Tanzania suggested that intra-African co-operation could be enhanced by developing regional technology for small-scale mining. Similarly, in the field of manufacturing of equipment for small-scale mining, the Ugandan delegation underlined the need for such a project and suggested that the Nigeria-based African Regional Centre for Engineering Design, and Manufacturing (ARCEDEM) be involved in the manufacturing of such equipment. The Zambian representative brought to the attention of the participants the co-operation programme with Tanzania in respect of training manpower to overcome the shortage of ore dressing and mining engineers in the latter country.

65. The representative of Nigeria explained that the mineral sector of the Nigerian economy was undergoing a review with regard to policies. The highlights of what was likely to come would include provisions leading to the encouragement of local production of minerals; the processing of minerals as far downstream as possible; the introduction of incentives towards backward integration to ensure downstream utilization of the country's minerals. ECA could perhaps draw up standard guidelines to enable member States to evolve policies that would be similar in format but different in context. It appeared that there was a strong need for close interaction between member States. The advantage of such an interaction was that, for instance, small-scale mining equipment for gold could be developed that would be suitable for many countries with little or no need for adaptation.

66. The representative of Rwanda informed the meeting that a tin smelter plant existed in Rwanda. However, due to the persistent slump in tin prices and the subsequent closure of industrial mines in Rwanda, production of cassiterite is not sufficient to feed the smelter profitably. Therefore, in the framework of intra-African co-operation and trade, the Conference should recommend that African cassiterite producers, in particular Rwanda's neighbours examine the possibility of having their production smelted at the Kigali smelter. This arrangement would be in the interest of all concerned. It would enable the Rwanda smelter operate profitably and the other countries would avoid huge transport costs for unprocessed ore over long distances and heavy investments for the construction of their own smelters.

67. The representative of Zimbabwe briefed the meeting on specific areas where the country was pursuing co-operation efforts with neighbouring countries, namely Botswana in respect of toll refining of copper and nickel matte, the procurement of coal from Mozambique and the provision of roasting facilities for the processing of metal concentrates.

68. Finally, the meeting noted that a number of countries had revised their mineral acts and legislation to promote intra-African trade of locally produced mineral commodities as well as increase local consumption. A similar strategy was being evolved with respect to industrial and chemical minerals, particularly phosphate resources.

Review of the report on the possibility of establishing of African associations concerned with specific minerals or groups of minerals (agenda item 6)

69. A representative of the secretariat introduced the paper on this item, mentioning that on many occasions and in several international forums, African producers and exporters of mineral raw materials had expressed their desire to form associations so as to better defend their interests. Such a desire was legitimate and called for a positive reaction from the ECA secretariat which in the light of existing associations and agreements on non-energy minerals attempting to control world prices of minerals such as copper, bauxite and tin, suggested that the establishment of any cartel be avoided. However, particular attention should be paid by the association to the pricing aspects. Likewise any association should concentrate on matters such as the structure of companies exploiting minerals mining policies; mechanisms for maximizing income from minerals and monitoring profit transfers by transnational corporations from consumer countries; the role of national corporations in the producer countries in mineral production, control and the socio-political environment; the international market, etc., so as to provide member States with adequate information on the development of their mineral resources.

70. In the discussions that followed, participants agreed on the idea of establishing an association but found its implementation premature. The participants recommended that the existing centres be strengthened to enable them to carry out studies on the contribution of minerals to the socio-economic progress of the African region.

Review of reports on the regional survey of copper and aluminium fabricating facilities and prospects for intra-African manufacture and trade in copper and aluminium-based products (agenda item 7)

71. Representatives of the ECA secretariat introduced documents ECA/NRD/TRCDUMRA/7 and ECA/NRD/TRCDUMRA/7/ESAS concerning preliminary survey of copper and aluminium fabricating facilities and marketing prospects for copper and aluminium-based products in Africa. The countries covered by the preliminary survey included Cameroon, Egypt, Ghana, Guinea, Kenya, Morocco, the United Republic of Tanzania, Uganda, Zambia and Zimbabwe. The surveys were considered preliminary because not all the information sought from the countries surveyed was provided to enable the development of a comprehensive multi-country collaborative strategy for the region's manufacture and intra-regional trade in copper and aluminium-based products.

72. The main observations and recommendations of the preliminary surveys are summarized below.

(a) With the exception of the Eastern and Southern African subregion (PTA/SADCC) there was primary aluminium production in all the other African subregional economic groupings. However, none of the African countries producing primary aluminium had an integrated aluminium industry (bauxite mining, alumina production, primary aluminium production and aluminium fabrication). Moreover, even where a country produced primary aluminium, most of the aluminium-fabricating facilities in the African region were underutilized because of shortages of foreign exchange to import aluminium metal because of long-term sales contracts by African primary aluminium producers to fabricators outside the African region;

(b) Transport problems in respect of mineral raw materials, metals and mineral-based products were reported to be constraints faced by non-ferrous metals fabricators in the region. These constraints led to the low utilization of existing fabricators and a low volume of inter-country trade in metals and metal products;

(c) Tariffs on imported non-ferrous semi-manufactures which allowed local consumeers to import their requirements instead of procuring them from local fabricators were reported to constitute a constraint to the development and growth of some non-ferrous metal fabricators in some countries. Higher import tariffs on semi-manufactures and lower import tariffs on primary metals would encourage local fabricators to import primary metals and promote the procurement by local consumers from local fabricators. Similarly, tariff barriers at the subregional level were contributing to low capacity utilization of existing fabricators as well as constraining increased inter-country trade in mineral raw materials and mineral products in Africa. The earlier these barriers were removed, the better for the non-ferrous metals industry;

(d) For national fabricators who imported their primary metals in hard currency, it might prove difficult for them to continue to operate where they could not retain, in hard currency, proceeds from sales of their products to other countries. It was possible that, where transportation would allow, some countries in the region without similar fabricating facilities could reach an agreement with existing national fabricators, whereby the countries could provide the existing national fabricators with some primary metals to be converted into products for consumption in the co-operating countries. This arrangement would improve capacity utilization of existing national fabricators, enhance regional industrial co-operation, and expand inter-country trade in non-ferrous fabricated products in the region;

(e) The procurement of fabricated metal products from overseas by projects supported by donors was reported to be limiting the growth and expansion of local aluminium and copper fabricators. Consultations among industry, government and consumers could establish how best the industry could improve its performance to satisfy domestic demand, and in some cases possibly supply the regional market. Donors could be encouraged to supply primary metals to local fabricators so that they could manufacture the products required by the projects;

(f) The sale of primary non-ferrous metals within the region at LME prices without a negotiated discount based on the transportation costs of metals to Western Europe could constitute a major problem in the procurement of raw materials by African non-ferrous metals fabricators. The practice made the products uncompetitive pricewise and discouraged private investment. Were this problem to be solved, the region's fabricators and foundries could use their existing capacities more effectively than at present, and increase the share of their markets within and outside the region;

(g) Regular consultations organized at subregional and regional levels by ECA and subregional economic groupings for representatives of non-ferrous primary metal producers, interested governments, non-ferrous fabricators and consumers of final products could lead to the increased production and consumption of non-ferrous metal products in the African region. Such consultations could, for example, lead to: the production of primary aluminium in Eastern and Southern Africa which had abundant energy using either bauxite or alumina from West Africa; the supply of primary aluminium to Eastern and Southern Africa from Central and West Africa; the procurement of primary copper and semi-manufactures by West African countries from Central, Eastern and Southern African countries; the improvement of capacity utilization of existing national non-ferrous fabricating facilities; specialization of product manufacturing by fabricators; exchange of information among relevant firms and countries; and the expansion of intra-African trade in mineral raw materials, semi-manufactures and finished products.

73. The Technical Preparatory Committee took note of the preliminary reports on the survey of copper and aluminium fabricating facilities and marketing prospects for copper and aluminium-based products in Africa. The Committee decided to recommend, for the consideration of the Ministers, (a) regular consultations as proposed under paragraph 69 above, and (b) the undertaking of a detailed survey by the ECA secretariat in collaboration with the existing subregional economic groupings, relevant international organizations including UNCTAD and relevant non-ferrous metals fabricators. The detailed survey would be considered by the fourth Regional Conference on the Development and Utilization of Mineral Resources in Africa.

74. In the discussion that followed, some participants informed the meeting that it would be unfair for copper producers to give transport discounts because the LME price did not take into account such costs and that the producers incurred many other costs besides those directly related to production. Other participants noted, however, that the lack of transport discounts to fabricators decreased their competitiveness.

Review of the reports on the African gemstones and semi-precious stones sectors and their future prospects in the framework of Africa's socio-economic development (agenda item 8)

75. This item was not considered, owing to the fact that no document from the secretariat or from member States was made available to the meeting.

Possibility of establishing special mechanisms for financing mineral development projects (agenda item 9)

76. A representative of the ECA secretariat introduced the paper on this theme, reporting that in accordance with the recommendation of the second Regional Conference on Mineral Resources Development and Utilization in Africa, the ECA held discussions with ADB in 1985 to investigate how the present structures of ADB could be used to provide assistance to the mining sector. The document on the discussions with the Bank underlined that the creation of a new institution or special mechanism for financing mining products was untimely because of the economic crisis in African countries and their inability to contribute to any new multinational institutions. The document also stressed that ADB was not operating under any statutory constraints that prevented it from intervening in the mining sector. The report on the discussions further highlighted that mining projects within the Bank were considered under the overall umbrella of the Industry Division and that there was no ceiling on the amount of resources that could be allocated to the mining sector, although the Bank had certain guidelines concerning the total allocation of resources to the industrial sector as a whole. Nevertheless, ADB in the future would be prepared to modify its structure to give prominance to the mining sector when the volume of its lending activity justified such sectoral demarcation. In conclusion, ADB requested ECA to inform African States through the Regional Conference that the Bank, EIB and the World Bank were able to finance mining projects and that project proposals should be submitted to these institutions for consideration in the future.

77. Reacting to the report of the secretariat, participants noted that the Bank had been involved in the mineral sector since 1984 and since then its operations had increased steadiy. In the light of the experience of one member State with ADB, it appeared that while the Bank had funds that could be channeled to projects in the mining sector, the terms were stringent and made their utilization difficult.

78. The meeting felt that ADB's capacity to appraise projects in the mining sector was inadequate due to the relatively small place assigned to mining in the structure of the Bank and suggested that ECA and OAU should negotiate with the Bank the establishment of a mining unit within its structure.

79. Looking back at ADB's lending record for the mining sector, the meeting considered that there was a clear bias in favour of large and specific mineral activities including rehabilitation projects and expressed the opinion that the Bank could extend its support to small mining projects which required little investments and did not require detailed appraisals.

80. In conclusion, the meeting indicated that there was a need for a special mechanism within the Bank for financing mining projects, and that since the contacts of ECA/OAU with ADB were made nearly three years ago, there was a need for another round of discussions on this matter between ECA/OAU and ADB, and that other avenues should also be explored, including contacts with other financial institutions such as BADEA and the EIB.

Review of the report on the development of the African mineral sector during the period 1985 to 1987 and projected possible prospects to beyond 1990 (agenda item 10)

81. A representative of the ECA secretariat presented a paper on the above subject giving a sectoral analysis of mineral output over the last five years covering 35 commodities produced in the region. The document underlined the constraints and adverse world conditions which had contributed to production falls, reduced competitiveness and low performance. The representative of the secretariat drew the attention of participants to the low prospects for the establishment of new iron ore mines, as well as integrated bauxite, alumina and aluminium schemes on account of mega-projects under way in Latin America where cheap energy is in available incomparable amounts. Commendable efforts had been made by a growing number of countries to restore gold production to its former heights and cited the outstanding performance in diamond production in recent years which had been further enhanced by substantial price rises.

82. With respect to the mineral fuel sector, the representative of the secretariat emphasized the need to develop coal production beyond the current annual output level of 6 million tons to reduce imports which were expected to rise to between 18 and 20 million tons by the year 1995, in order to meet the requirements for steel production, power generation, chemical industries and domestic consumption.

83. The oversupply situation was an inevitable consequence of over-investment and member States should react to this situation by improving the national mineral economy, undertaking rehabilitation programmes, increasing performance and developing a secondary recovery sector introducing heap and bacterial leaching to retreat old mine dumps, tailings and low-grade primary deposits of copper, gold and uranium.

84. Regarding future developments in new areas until the end of the decade, the prospect of developing the minor metal sector and producing industrial minerals such as mica, graphite, beryllium, lithium and others whose modest capital investment would fall within the scope of national resources available, was presented as a possibility to generate employment, income and supply domestic industries.

85. The industrial mineral sector which figured high among the priorities of member States would only be satisfactorily developed if the industry could meet the high-quality standards that were expected in many areas of utilization of industrial minerals.

86. Emphasis should be placed on evaluating and exploiting local chemical raw materials feeding domestic industries such as pulp and paper, alumina and glass production, textiles, soap and detergents, PVC and water purification so as to reduce reliance on imported materials. Similarly, the participants acknowledged the need to develop fertilizer raw materials so as to set up processing units utilizing acid phosphates.

87. The rate of utilization of smelting, refining and processing capacity which was on the increase as far as copper and base metals were concerned was largely inadequate in respect of processing phosphate rock into chemical fertilizers. The mining sector was important in the provision of employment and stood at 1.2 million and possibly between 500,000 and 750,000 people were involved in informal illicit operations. That gave a disproportionate dimension to unofficial mining activities relative to rational operations and it was suggested that the Conference should consider the matter and find solutions to the problem since it was prejudical to governments' efforts to control the development of mineral resources.

Any other business (agenda item 11)

88. A number of representatives from Uganda presented reports outlining various scientific and technical work carried out in relation to mineral development in Uganda. These reports are summarized below.

Alkali stabilization of lateritic soils from Uganda - a potential construction and ceramic material

89. Three lateritc soils from central Uganda were stabliized with sodium hydroxide in varying concentrations and the moulded and cured specimens made from the soils subjected to various tests to evaluate their response to the stabilization producers.

90. The results showed that the soils gave similar trends in response irrespective of parent rock with 10 to 12 per cent sodium hydroxide yielding the highest strength which was about 20 times greater in compression compared to the unstabilized material. Addition of sand to one of the soils at 10 per cent NaOH led to improved strength, density and water absorption with an optimum sand content at 125 per cent. The strength was remarkably higher, even for NaOH concentration as low as 2 per cent.

91. It was concluded that lateritic soil could be stabilized successfully with sodium hydroxide and sand to give a strong and durable construction material.

92. In the discussion that followed the representative of Zimbabwe wondered what energy savings could be expected compared to traditional methods of making construction materials. The author replied that these had not been quantified in the study.

Alternative cements based on lime-pozzolanas in Uganda

93. In Uganda, lime was currently produced at Kaku river in Kisoro Sub-District, Hima, Muhokya and Dura in Kasese District as well as at Tororo. Volcanic ash occurred in Kisoro area, and in Bunyaruguru - Fort Portal volcanic fields.

94. Studies carried out so far had not indicated any conclusive optimum mixing ratios for the production of pozzolime cements. The results had largely been affected by the poor quality of the lime produced in the country.

95. There was, however, an indication that if good quality lime (65 per cent CaO) was used with volcanic ash (possolana) and quarry dust in the ratio 1:1:4 respectively, a strength of 1.8 MPa of the blocks could be attained after 39 days of curing.

96. In response to questions from the representatives of Nigeria and Chad, the author explained that the moulded bodies had been fired in a laboratory electric furnace and that in some cases cement had been added. At 10 per cent cement content the results had indicated that the mechanical strength was comparable to the values obtained for the lime-pozzolana mixture.

Occurence, production and the economic status of tin (cassiterite) in Uganda

97. Cassiterite occurrences in Uganda were of hydrothermal, pegmatite, eluvial and detrital type. Tin production had started in 1927 with an average daily production of 315 kg rising to the record production peak of 1,575 kg in 1936. The period of 1939 to 1960 was marked by a general decline mainly attributed to shortage of labour as a result of the Second World War and the depletion of the easily worked occurrences. The economic status of tin was evaluated on the basis of other minerals produced in and exported from Uganda and was found to have generally declined with time. The increasing world tin prices starting with the 1960s coincided with low production capacity in Uganda. However in that tin economic boom, Uganda collected more than 50 per cent of its total tin revenue for the period 1927-1977 in only 14 years. The paper proposed the evaluation of the tin occurrences in order to assess their economic viability for tin-based industries in the country.

98. A member of the ECA secretariat asked whether any rare earth minerals had been encountered in the pegmatites. The author answered that chemical analyses of the materials had not been performed. However, future work would keep in mind the possible availability of such minerals in the expermental materials.

Kinoni radiometric anomaly; progress of geochemical exploration

99. A radiometric anomaly had been found at Kinoni Hill, Masaka District. Anomalous radiometric values were closely associated with anomalous magnetic values. Geological mapping had indentified five rock types, namely a granite gneiss, schists, quartzites, laterites and pegmatites. Geochemical investigation had found no sulphide mineralization of copper and lead. Anomalous values occurred for Zn sulphide mineralization which was thought to be insignificant.

100. A representative of ESAMRDC asked what was the extent of the Zn anomaly in relation to that of Pb. The author pointed out that no Pb anomaly had been found and that of Zn was small.

The Uganda gold potential, development and constraints

101. Gold in Uganda was first discovered in 1931. It reached peak production of about 23,000 troy ounces in 1938.

102. Three major modes of gold occurrence were observed, namely gravels and as a solid solution in sulphides of basemetals mainly pyriteferrous.

103. A number of constraints in the development of a gold mining industry in Uganda were cited. These included shortcomings in the mining policy with regard to the prospector and the buyer, lack of mining know-how on the part of the miner, political upheavals in the 1970s, and a limited pool of mining entrepreneurs.

The role of the central laboratories of the Geological Survey and Mines Department of Uganda in mineral exploration and other services

104. The paper outlined the role played by the central laboratories of the Geological Survey and Mines Department in assisting geologists, mineral prospectors, small-scale miners, government departments/agencies and other parastatal bodies in their various spheres of work related to:

(a) Mineral exploration;

(b) Feasibility studies in quantification of ore deposits;

(c) Quality control of industrial raw materials and products;

(d) Identification of the rock/mineral species;

(e) Grading of mineral ores;

(f) Complete assays of industrial raw materials (e.g., sand, limestone, iron ore, etc.);

(g) Ore separation and sizing; and

(h) Analysis of sediments and borehole sludges.

105. Current problems faced by the laboratories were categorized as follows:

(a) Lack of adequately trained manpower, e.g., petrologists, geochemists, etc.

(b) Lack of up-to-date equipment as the existing ones were either obsolete or lacked accessories. Ways and means of rectifying the situation were suggested including further training of the staff and procurement of new equipment.

106. In conclusion to the Ugandan presentations, the meeting noted the excellent work that Ugandan scientists were carrying out and advised that they should also aim at identifying projects for which immediate production was possible and those that could contribute to increased knowledge of the reserves and more investment in the mineral sector.

107. The representative of the Commission for the Geological Map of the World and General Co-ordinator for the 1:500,000 scale international ore deposits map of Africa first recalled the objectives and structure of the Commission and informed the participants that the project related to the establishment of the map was presented to the first Regional Conference on Mineral Resources Development and Utilization in Africa, in Arusha in 1981. He reminded the meeting of the working methods of the Commission and mentioned progress in the implementation of the project as well as the difficulties encountered in the course of the establishment of the map and which remain to be resolved.

108. In the ensuing discussions, questions were raised on the composition of the Commission, the deadline for the completion of the maps, the modalities of co-operation between the Commission and African countries with respect to the establishment of the map, and the use of information on marine mineral resources and information acquired through satellites.

Contributions from international organizations and observers

109. In his statement, the representative of the United Nations Conference on Trade and Development (UNCTAD) provided some highlights on the activities currently undertaken by UNCTAD in the field of minerals and metals, particularly in areas relevant to the discussion of the meeting. The UNCTAD secretariat had initiated a wide range of research projects on the role of the mineral sector in the development process of developing countries. The research work would be undertaken at the level of individual developing countries with its focus directed mainly on the interactions and feedback effects that arose between economic activity in the mineral sector and activities with the rest of the economy. The identification of areas of multilateral or regional actions and forms of support which the international community could provide at the country level was the main objective.

110. With regard to ongoing UNCTAD activities on specific minerals and metals, the meeting was informed that a United Nations Conference on Copper would take place under UNCTAD auspices in late June 1988. A similar conference on the subject would also take place later in the year. Further, UNCTAD continued to provide substantive servicing for the Committee on Tungsten and for the Intergovernmental Group of Experts on Iron Ore. Following the results achieved at UNCTAD VII, consultations were taking place on a number of commodities including bauxite, manganese and phosphates, and efforts continued to reach the objectives on diversification as well as processing, marketing and distribution.

111. Another project which was developed in co-operation with ECA would aim at assisting in the development, improvement (including re-orientation if necessary) and implementation of commodity programmes and policies. The project also would take into account the needs for enhancing the skills of African personnel and for improving the institutional capacity to process and utilize economic and technical information. UNCTAD would be extremely interested in obtaining views about the areas in which individual African countries might be interested to participate in the technical co-operation programme offered by the project.

112. The representative of the United Nations Office for Ocean Affairs and the Law of the Sea underlined the concerns of African mining States with respect to the impact of future sea-bed production on their export earnings. The United Nations Convention on the Law of the Sea, a comprehensive treaty covering all aspects of marine affairs, adopted in 1982, included a part containing provisions specifying the regime for the international area of the sea-bed and ocean floor beyond national jurisdiction, and its resources. Given the fact that the area and its resources were designated common heritage of mankind, one of the major themes in the formulation of the Convention's provisions was to strike a balance between the development of sea-bed minerals, the benefits of which would be shared by developing countries, among others, and the protection of developing land-based producers who may suffer adverse effects from future sea-bed production. The Convention, therefore, included a number of provisions intended to provide protection to developing land-based producer States, e.g., the production limitation formula, promotion of commodity agreements, deterrence to unfair economic practices in sea-bed mining. A Special Commission of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea had been studying the problems that might be encountered by such States as a result of future sea-bed production, so as to recommend appropriate remedial measures. The Special Commission had accomplished a substantial amount of work during the past nine sessions. The meeting was informed that serious deliberations were being undertaken at present with regard to remedial measures, including economic adjustment measures or compensatory measures that could be adopted by the International Sea-Bed Authority.

113. The representative of the United Nations Centre for Transnational Corporations (UNCTNC) outlined the Centre's technical assistance programme which responded to many requests for advice in specific mineral investment projects covering both legal and financial aspects. There were special areas in which the ECA secretariat's work could be supplemented by that of UNCTNC. Such areas could include case studies of gold mining covering legal aspects and physical dimensions, with examples from developing countries such as Papua New Guinea. Not much contribution by the UNCTNC was envisaged in the general areas of small-scale mining since transnational corporation did not, as a general rule, participate in such operations.

114. The representative of the United Nations Educational, Scientific and Cultural Organization (UNESCO) pointed out that the role of UNESCO consisted in supporting the training of manpower (geologists, mining engineers, etc.) through courses in mining geology funded by external sources by way of geological field studies in the pre-Cambrian formations, and offering fellowships for the participation in workshops and seminars in the field of earth sciences.

115. The representative of Radiator and Tinning (Pvt) Ltd. from Bulawayo, Zimbabwe, informed the meeting that copper and non-ferrous manufacturing plants, rolling mills and presses were only operating at 20 to 25 per cent of their capacity due to the lack of zinc for the manufacture of brass, strips and rods. He underlined the shortage of spare parts for the continous operation of plants. Private concerns in Zimbabwe were striving to promote intra-African

trade of basic minerals/metals feeding metal manufacturing industries through the PTA's clearing house facilities. More efficient mechanisms at that level could improve the performance of metal industries in the subregion. He pointed out that there was a need for foreign exchange relaxation for the purchase of metals within the PTA area so as to increase production and exports of finished products to neighbouring countries and worldwide.

116. In the discussions that followed, the representastive of Radiator and Tinning (Pvt) Ltd. explained that competitiveness was hindered by licensing problems rather than by the cost of raw materials. Regarding consumption growth of copper, aluminium and metal alloys, he pointed out that the building sector's dynamism and the improved prosperity of the people provided opportunities for increased domestic consumption in the region. In the field of manufacturing technologies, the inclination to set up advanced production technologies was considered to entail limited employment opportunities and the need for outside skills for maintenance and operations.

Agenda for the ministerial meeting of the third Regional Conference (agenda item 12)

117. The following provisional agenda was adopted:

1. Opening of the meeting.
2. Election of officers.
3. Adoption of agenda and organization of work.
4. Statements of delegations.
5. Consideration of the report of the Technical Preparatory meeting and recommendations.
6. Any other business.
7. Adoption of the report and recommendations of the third Regional Conference on the Development and Utilization of Mineral Resources in Africa.
8. Date and venue of the next Regional Conference.
9. Closure of the Conference.

Adoption of the report of the Technical Preparatory Committee (agenda item 13)

118. The report of the Technical Preparatory Committee was adopted after amendments.

Closure of the meeting (agenda item 14)

119. After an exchange of courtesies, the Chairman declared the meeting closed.

THE KAMPALA PROGRAMME OF ACTION
ON THE DEVELOPMENT AND UTILIZATION OF AFRICA'S MINERAL RESOURCES

Preambie

The Conference of Ministers responsible for mineral resources development and utilization in Africa, meeting in Kampala, Republic of Uganda, from 13 to 15 June 1988, mindful that the objectives of the Regional Conferences on the development and utilization of mineral resources in Africa are to promote co-operation by the countries of the region in their mineral development activities, having reviewed and considered:

(a) The progress in the implementation of the recommendations of the two previous Regional Conferences (1981 and 1985) on the Development and Utilization of Mineral Resources in Africa, including review of reports on activities in each member State, subregional centres and international organizations with regard to developments in the mining sector;

(b) The report on national mineral development policies in Africa and their effect on intra-African co-operation in mineral resources development and utilization including country reports reviewing national mineral development policies indicating what aspects of those policies have enhanced or hindered intra-African co-operation in the development and utilization of minerals in the region, and proposing how such policies could be improved to strengthen the desired co-operation by countries in the mineral sector;

(c) The report on the possibility of establishing African associations concerned with specific minerals or group of minerals;

(d) The reports on the regional survey of copper and aluminium fabricating facilities and prospects for intra-African manufacture and trade in copper and aluminium-based products;

(e) Report on the possibility of establishing a special mechanism within the African Development Bank for financing mineral development projects in Africa;

(f) Report on the development of the African mineral sector during the period 1985 to 1987 and projected possible prospects to beyond 1990; and

(g) The inaugural address by H.E. Yoweri Kaguta Museveni, President of the Republic of Uganda;

made the following conclusions and recommendations for implementation by member States, subregional and regional institutions and international organizations.

Conclusions and recommendations

1. The Conference of Ministers noted that an effective monitoring mechanism for the implementation of the recommendations of Regional Conferences on the Development and Utilization of Mineral Resources in Africa is necessary. The Ministers note that the Lusaka Programme of Action had assigned the task of monitoring the implementation of recommendations on the development and utilization of mineral resources in Africa to regional and subregional

institutions concerned. The existing regional and subregional institutions are: the Economic Commission for Africa (ECA), the Organization of African Unity (OAU), the Central African Mineral Resources Development Centre (CAMRDC), the Eastern and Southern African Mineral Resources Development Centre (ESAMRDC), the Economic Community of West Africa (CEAO); the Economic Community of Central African States (ECCAS); the Economic Community of the Great Lakes Countries (CEPGL); the Economic Community of West African States (ECOWAS); the Preferential Trade Area (PTA) for Eastern and Southern African States; and the Southern African Development Co-ordination Conference (SADCC). Hence the Conference of Ministers requests the Executive Secretary of ECA and the Organization of African Unity to urge the executive heads of the regional and subregional institutions to act as called for by the Lusaka Programme of Action, and report to the Ministerial meeting of the fourth Regional Conference.

2. The Conference of Ministers noted that the maximum impact that could result from mineral development in Africa would be realized where regional upstream and downstream industries based on mineral production exist. The Ministers thus recommend that member States, on their own or through the existing subregional economic groupings and intra-subregional arrangements, take all the necessary measures to acquire the necessary capabilities (technology and capital) to develop their resources in the best interest of the African continent.

3. In spite of the fact that the Lagos Plan of action called upon African member States to establish regional and subregional institutions for the promotion of co-operation by African countries for self-reliant and self-sustaining social and economic development in general and mineral development in particular, the Conference of Ministers noted with regret that (a) not all member States have joined the existing subregional centres for mineral resources development resulting in a weak take-off of these institutions, and (b) that there are some subregions without mineral development centres as called for by the Lagos Plan of Action, and therefore recommends that:

(i) the member States who have not joined their existing respective centres should consider doing so without further delay. In this regard, the Executive Secretary of ECA is requested to take up the matter with the Heads of State and Government of OAU; and

(ii) measures be taken for detailed studies on the feasibility of establishing similar centres in the West and North African subregions.

4. In consideration of the possibility of establishing African associations concerned with specific minerals or groups of minerals, the Conference of Ministers noted that the formation of such associations at this stage is premature. For the time being, the Conference of Ministers urges intensified interaction among member States, African producers of mineral raw materials and mineral-based products, under the auspices of relevant regional and subregional institutions, in order to improve the contribution of the mineral industry towards the economic and social advancement of the African region.

5. Aware of the need to restructure and harmonize existing national mineral development policies, member States are urged to assess their current policies and practices, share information and experiences among themselves and with relevant institutions within and outside the region, among other needed measures, with a view to evolving national mineral development policies that will promote and sustain co-operation among member States in the development and utilization of mineral resources. These measures will promote subregional and regional joint ventures in mineral development projects; increase intra-African trade in mineral commodities and products of the mining industry and enhance the consumption of such products in the economies of the region.

6. The Ministers note that small-scale mining of precious and semi-precious minerals is a growing activity in many African countries and faces many constraints including illicit trade which deprives governments of substantial foreign exchange earnings. The Ministers recommended that ECA, in collaboration with the subregional institutions, should organize seminars aimed at examining:

(a) The full potential in Africa for the development of small-scale mining for precious and semi-precious minerals;

(b) Current status of small-scale mining for precious and semi-precious minerals in Africa, whether illicit or legal; and

(c) The legislative and fiscal regimes governing small-scale mining for precious and semi-precious minerals in various African countries.

And as a result of the above, recommended a strategy for a positive growth of small-scale mining for precious and semi-precious minerals. The recommendations should deal with legislative, fiscal and technological aspects.

7. On the regional survey of copper and aluminium, the Ministers took note of the preliminary reports and recommended that regular consultations among governments, producers of bauxite, alumina and copper fabricators and consumers be held under the auspices of existing subregional and regional institutions to determine prospects for increased intra-African manufacture and trade in copper and aluminium-based products. The Ministers further requested ECA, in collaboration with other relevant United Nations agencies, existing subregional and regional institutions and member States, to prepare a detailed study on the subject, with the participation of fabricators and consumers, for consideration at the fourth Regional Conference on the Development and Utilization of Mineral Resources in Africa.

8. Given the importance of minerals in the development of African economies and the peculiar nature of mineral resources development, the Ministers recommended that in the same way as it has done for agriculture, industry and other sectors, ADB should set up a mechanism for financing new mineral resources development projects and the rehabilitation of existing production facilities. The Ministers further requested ECA to approach BADEA with a view to establishing how the Bank could support mineral development projects in the region.

9. The Ministers noted that there is an urgent need to develop and modernize Africa's agriculture. The mineral industry and the production of phosphate and potash fertilizers as well as agro-minerals in an essential input into that sector. Some African countries are endowed with phosphate and potash deposits that have been identified and evaluated. The Ministers requested ECA, in co-operation with regional and subregional organizations, to promote the development of those deposits as well as research on sulphur in Africa so as to boost agricultural production.

10. The Ministers noted that sea-bed mining would be a possible future alternative source of nickel, copper, manganese, cobalt and other minerals produced in land-based mining operations. Given the likelihood that the recovery of minerals in international sea-bed areas could adversely affect the economies of developing land-based producers of similar mineral resources, and the principle that the exploitation of mineral resources in international sea-bed areas ought to financially benefit mankind as a whole, it is stressed that participation of developing countries in the ongoing negotiations of the Preparatory Commission of the International Sea-bed Authority and the International Tribunal for the Law of the Sea ensures:

(a) The preservation of the fundamental concept of the equitable sharing of financial benefits accruing from the commercial exploitation of the common heritage resources;

(b) The establishment of the modalities for the payment of financial compensation or the implementation of other means of compensation, including economic adjustment systems so as to mitigate the adverse impact of mining the resources of the common heritage of mankind on the economies of developing land-based producers States; and

(c) In this connection the Ministers took note of the work of the United Nations Office for Ocean Affairs and the Law of the Sea (UN/OALOS) in the field of sea-bed minerals, and in servicing the Preparatory Commission, and recommended continuing co-operation between ECA and UN/OALOS in assisting member States to achieve the above objectives.

11. The Ministers requested the United Nations specialized agencies and other international organizations to assist the member States, regional and subregional institutions in the implementation of the Kampala Programme of Action on the Development and Utilization of Mineral Resources in Africa.

12. In order to ensure an effective follow-up of the recommendations of the Regional Conferences and in order that the instruments for the implementation of national development policy are associated with and become part of the recommendations, the future Regional Conferences on the Development and Utilization of Mineral Resources in Africa should invite, in addition to government representatives, participants from industry, universities and labour groups.

13. To ensure that the implementation of the recommendations of the Regional Conferences are undertaken in an integrated manner so that mineral development policies are integrated into overall national development and planning, and in order to ensure that subregional and regional perspectives are incorporated, the recommendations of the Regional Conferences should be effectively disseminated at the national level to all national institutions, ministries and industries and at the subregional and regional levels to all subregional and regional institutions and economic grouping.

14. African and foreign investors should encourage the formation of African mining and mineral-based industries and multinational corperations in which they should invest in order to reduce the overdominance of foreign companies in the sector and allow African countries to exercise their sovereignty over their mineral resources.

15. The development of the mineral sector in Africa will always require co-operation among the African countries at subregional and regional levels. Such co-operation would enhance intra-African trade in mineral raw materials, semi-finished and finished products and will necessitate the establishment of transport links among the States.

ADDRESS BY
HIS EXCELLENCY YOWERI KAGUTA MUSEVENI,
PRESIDENT OF THE REPUBLIC OF UGANDA
AND CHAIRMAN OF THE NATIONAL RESISTANCE MOVEMENT
AT THE MINISTERIAL SESSION OF THE THIRD REGIONAL CONFERENCE
ON THE DEVELOPMENT AND UTILIZATION OF MINERAL RESOURCES IN AFRICA

Kampala, Uganda, 13 June 1988

Mr. Chairman,
Honourable Ministers,
The Deputy Executive Secretary of the United Nations
Economic Commission for Africa,
Distinguished Guests,
Ladies and Gentlemen,

It is a great honour for me, the Government, the National Resistance Movement and the people of this country to welcome you all to Uganda. I trust that the moderate arrangements we have made for your Conference have been found satisfactory for the conduct of the important business ahead of you.

I am informed that national technicians and ministers responsible for mineral resources development in Africa regularly meet, under the auspices of the United Nations Economic Commission for Africa (ECA), to determine ways and means of promoting and consolidating co-operation among our countries in mineral development and utilization. I further understand that your first such Conference was convened in Arusha, United Republic of Tanzania in 1981, and the second in Lusaka, Zambia in 1985. Our country is honoured to have been selected to host this third Conference, in spite of the fact that the mineral resources of the Republic of Uganda may not be as abundant or as developed as those of the United Republic of Tanzania or the Republic of Zambia. The fact that you are holding this Conference in Kampala, however, will greatly benefit our country as many of our technicians and policy makers will be inspired by your varied invaluable experiences, leading to the enhancement of our own national efforts in the development and utilization of our mineral resources.

Mr. Chairman,

The African continent is blessed with abundant and diverse mineral resources which include bauxite, chrome, coal, cobalt, copper, diamonds, fertilizer raw materials (phosphates and potash), gold, industrial and building materials, iron ore, lead, salt and chemical raw materials, gems, precious and semi-precious stones, tin, tungsten, zinc, etc. I hesitate to attempt to make a list of all the mineral resources, their geographical distribution or reserves estimates, not only because I am addressing those who know (or should know) but also because I am aware that large areas of our continent have not been systematically explored.

During colonial times, our mineral resources were developed with the initiative of foreign concerns, using criteria of their own, to supply mineral raw materials mostly for industries outside the African region. Only those mineral resources of interest to the foreign developers were developed. The mineral resources developed were only processed in the African region to the extent required by industries in the consuming countries, without due regard for the production of consumer, intermediate and capital goods in Africa and for Africa. The consequences of this system of mineral development were, among others, that our indigenous initiatives to develop mineral resources for local consumption were suppressed. For example, where the indigenous metal workers and craftsmen were working gold, copper and iron ore to produce metal products, these were taken over by the new foreign mineral developers. The continent's mineral resources of no interest to foreign developers but which could have

been used locally remained undeveloped or underdeveloped. For example, industrial minerals and building materials which are of low value and bulky, such as clays, building-stones, etc., but essential for physical infrastructure construction, received very low priority. Furthermore, a culture dependent on imported simple metal tools, previously locally made, such as hoes and other household items, was established. Thus, African mineral development during the colonial period contributed little to the economic advancement of our continent.

Mr. Chairman,

It is nearly 20 years since many of our countries gained their political independence. On the midnight of independence day many of our countries exercised their rightful duty of acquiring the ownership of their mineral resources in the ground. That was a quick and bold step in the right direction, and our peoples' expectations of a better life arising from the management of our economies by ourselves were spurred. However, as the years passed by, and in spite of some of our countries acquiring shares in mines and increasingly getting involved in the management of mineral development activities, we have yet to exercise effective sovereignty over our mineral resources.

The requirements of our mining industries such as machinery, equipment, chemicals, spares and technical services continue to come from outside. Because of continued depressed commodity prices for our exports, and ever-increasing import costs for capital goods and services, we are increasingly finding it difficult to import such materials and services. These imports of materials and services represent, therefore, foreign exchange leakage (outflow) from our economies. Moreover, the inputs deprive us of opportunities for African industrial development and growth.

There is no doubt, therefore, that we have not made enough progress in converting our mineral raw materials to consumer, intermediate and capital goods. The result of all this has been that our economies continue to suffer from lack of considerable value-added benefits. National and regional industries which would have supplied the mineral processing and fabricating capital goods industries have been prevented from development and growth. Further, our African economies have been deprived of consumer, intermediate and capital goods for use in other sectors. Likewise, our countries have been deprived of increased employment opportunities and skills acquisition. Thus, the present condition of the African mineral industry in terms of its contribution to the region's development is very poor indeed.

Consider the fact, for instance, that the most basic mineral industry anywhere in the world is the one of iron and steel. Most machinery, equipment, tools and components are made of iron and steel. These products are used in many other industries, like mining machinery and equipment, mineral processing plants and metal fabricating plants. Other industries, such as building and construction, transportation, water distribution, etc., all consume iron and steel products. Thus, in a country which does not produce steel, and has no funds to import the steel products, all activity in the industries cited above cannot function. The proper operation of such industries would

have stimulated other activities in the country; for example, employment opportunities and skills acquisition would have been tremendous. Therefore, the absence of an integrated iron and steel industry in most of our countries represents one of the most ideal sectors for co-operation.

Here in Uganda, we have an iron deposit which is currently under investigation to establish the quanity and quality of the reserves. In this connection, we would welcome proposals which could result in the establishment of a subregional or regional integrated steel industry. On the other hand, since Uganda has not identified any coal resources in the country, we would welcome proposals for our participation in a coal development industry in the subregion.

Another group of minerals which are important for development and which call for co-operation are fertilizer raw materials, such as phosphates and potash. These minerals are essential for agricultural development, among other uses. With food shortages in the region and populations rising at higher rates than food production in many areas, increased fertilizer use becomes inevitable. Uganda has a large phosphate deposit (200 million tonnes of proved reserves) and arrangements are under way to develop it under the PTA arrangement.

Take the case of copper and aluminium. These are important metals for such sectors as electrification programmes, the construction industry, transport industry and consumer goods. With regard to aluminium, there is no primary metal production in Eastern and Southern Africa. Yet the subregion has considerable energy potential for the conversion of aluminium raw materials into aluminium metal. Certainly there is a need to intensify the exploration of aluminium ore (bauxite) in this subregion. At the same time we could consider importing bauxite or alumina (aluminium oxide) from West Africa. This could then be converted by abundant energy (coal and electricity) available in Eastern and Southern Africa to aluminium to meet the needs of our people. This, in my opinion, would constitute yet another area for co-operation.

Another important metal deserving consideration is copper. This is produced largely in the Eastern and Southern subregion and the Central African subregion. However, some of our countries continue to import copper products from outside when there are a number of copper fabricators within. Consultations among Governments and fabricators should enable us to determine ways of increased fabrication of copper-based products. Further, co-operation arrangements might even be established as a result of the proposed consultations: for example, some West African countries could obtain their copper and copper-based products from Eastern or Central African States.

Our countries could also co-operate in the sharing of existing mineral processing facilities or in the establishment of new ones. For example, here in Uganda, we used to produce blister copper (up to 99.46 per cent purity) for export. Yet our own copper fabricating facility imported pure copper (99.98 per cent) metal for fabrication. This type of operation is wasteful because it encroaches on our scarce and meagre foreign exchange resources. Instead we should co-operate with other countries in our region, such as Zimbabwe and Zambia which have the required technology to purify our copper. This arrangement would also reduce regional investment requirements.

Mr. Chairman,

It is clear to me that the maximum impact which the development of our mineral resources can have in the economic and social advancement of our people could be realized where the requirements of our mining industries are increasingly derived from the region. Furthermore, the output of our mining industries must increasingly be converted to consumer, intermediate and capital goods within and for consumption by our countries. Additionally, spending patterns of our countries must be based on goods and services produced in our regional economies. This mineral development strategy would embody and concretize the spirit of the Lagos Plan of Action and the Final Act of Lagos adopted by African Heads of State and Government in 1980, the recovery programme for the African mineral sector along the lines defined in Africa's Priority Programme for Economic Recovery (APPER) and the United Nations Programme of Action for African Economic Recovery and Development (UN-PAAERD).

Mr. Chairman,

At this point I would wish to strongly advise that mineral exploitation should be linked with national development aspirations. Minerals are exhaustable and unlike agricultural products they are not renewable. People should remember that agriculture is everlasting oil or any other mineral you would like to compare it with - provided the environment is not degraded. Hence, we need to put into proper perspective present-day excitement about oil and other minerals which, sometimes, diverts peoples attention from this external resource. Therefore, in my view, minerals should be used for strategic reasons and not simply for earning foreign exchange, which we use to buy consumer goods e.g., Colgate, perfumes, wigs, even luxury cars. To do so is to repeat what the African chiefs did in the past, whereby they sold slaves and minerals in exchange for beads, trinkets, etc. Minerals, therefore, in my view, ought to be used to buy machinery or to transfer technology to our countries. To use minerals to acquire machinery and technology can be historically justified because technology is a sustainable resource which can serve our future generations.

I need not remind you that the developed countries who import our mineral commodities have for years been building up strategic stockpiles for their future generations. Therefore, to extract minerals out of the ground and to fail to use them to acquire a resource of sustainable nature, like technology, is to condemn posterity to poverty - which we have no moral right to do. Our future generations should inherit from us transport systems, industrial establishments, power generation and distribution facilities and other infrastructure built of our minerals and not ghost towns of our present mining areas; and above all, we must bequeath to our children <u>technology</u> which would enable them to exploit other natural resources, even when the present known resources in the sub-soil are exhausted.

Mr. Chairman,

The strategy I have outlined for the development and utilization of mineral resources in Africa can work despite the apparent weaknesses of individual member States. As old wisdom would say, together we can stand but singly we are likely to fall. Individually, we might not possess all the factor inputs required to develop our mineral resources in the manner I have proposed. Collectively we could, through the use of complementary resources, the pooling of scarce investment resources, the establishment of African multinational enterprises, develop mineral-based industries and promote the creation of large markets for mineral-based products and services in the African region.

It is most encouraging for me to observe that our subregional economic subgroupings such as the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS), the Preferential Trade Area of Eastern and Southern African States (PTA), and the Southern African Development Co-ordination Conference (SADCC) have programmes for the development and utilization of mineral resources, and that ECA regularly brings all the African countries together to promote co-operation in mineral resources development and utilization at the regional level. I am advised that this Conference will review progress in the implementation of the recommendations of the two previous Regional Conferences; consider other important subjects on mineral development and utilization in Africa; and adopt other recommendations intended to enhance co-operation by our countries in the development and utilization of mineral resources to be implemented by member States, subregional and regional institutions, and international organizations.

It is at this stage that I would wish to offer some advice which could contribute towards the effectiveness of your regular meetings. (I am not by any means implying that your previous Conferences were ineffective!). The basis of my advice is placed on the general observation that however good recommendations of conferences like yours might be, they will be worth little if anything at all to the people of the African region unless they are expeditiously put into physical effect.

To facilitate the implementation of your recommendations, it might be wise to disseminate such recommendations at the country levels as widely as possible so that: national institutions can restructure their national development policies and practices to respond to subregional and regional needs; potential investors (both local and foreign) are encouraged to invest in African multinational mineral-based industries to supply the demands of the co-operating countries and others; intra-African trade in mineral raw materials, semi-manufactured and final products can be enhanced; improvements of transport links among member States to facilitate intra-continental trade can be effected; and multi-country collaboration in such areas as manpower development and exchange, research and development, and the sharing of experience in mineral-related activities can be expanded. To this end, I

would further propose that at your future conferences, encouragement be given to the participation of relevant representatives of industry, labour and universities, so that the instruments for the implementation of national development policies are associated with and become party to the recommendations your conferences adopt.

Mr. Chairman,

I look forward to your recommendations and the active participation of our Government in their implementation.

I now declare this Conference open.

Thank you.

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